REMARKS

Claims 1-43 are pending. Of those, claims 1, 24, 32 and 39 are independent.

Second Request for Initial Forms PTO-1449

On October 30, 2001, Applicant submitted an IDS. At this time, Applicant has not received copies of the initialed Forms PTO-1449 associated with the IDS, despite having requested such with the previous response. Accordingly, Applicant, again, requests copies of the initialed Forms PTO-1449 as confirmation that the references cited therein have been made of record.

§102 Rejection

Beginning on page 2 of the Office Action, claims 1-4, 7-9, 11, 12, 17-22, 24, 32 and 39 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,449,734 to Shrivastava et al. (the '734 patent). Applicant traverses

Previously Applicant argued, among other things, that it was unreasonable to interpret the '734 patent (which is directed to server clustering) as disclosing a local storage server and a remote storage server. In particular, the Examiner focuses upon lines 9-16 of column 7, and line 63 to column 7 to line 11 of column 8, of the '734 patent. As to these passages of the '724 patent, Applicant argued[1]:

> The cited passages concern the sending of an update from one of the nodes to the other nodes, which implies the making of connections between the various nodes. The Examiner's interpretation of the cited passages treats a first node, e.g., 60_1, of cluster 58 as corresponding to a local storage server and a second node, e.g., 60_2, of cluster 58 as corresponding to a mirror storage server.
>
> A local storage server and a mirror storage server perform different roles. In contrast, the roles performed by nodes 60_1 and 60_2 of cluster 58 are, in essence, interchangeable or fungible. Hence, it is unreasonable to interpret the '734 patent is disclosing a local storage server and a remote storage server.

The Examiner has rebutted this argument as follows. When an update occurs to the clustered servers disclosed by the '734 patent, the updated is sequentially replicated among the servers by one of the servers acting as the master and the others acting as

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[1] See pages 3-5 of the previous response.

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slaves. As such, the Examiner considers the master server as being analogous to the local storage server and any one of the slave servers as being analogous to the mirror storage server.

It remains Applicant's position that the Examiner's interpretation of the '734 patent, namely two nodes (servers) of cluster 58 as being a local and a mirror storage server, is unreasonable. Applicant continues to traverse as follows.

Initially, Applicant submits that the Examiner is given little, if any, weight to the significance of the term "mirror" in Applicant's claim. That is improper. One of ordinary skill in the art would give weight to this term (and its variants, e.g., mirroring, etc.). For the Examiner's convenience, Applicant has enclosed examples of how the ordinarily-skilled artisan would give weight to "mirror" (and variants thereof) relative to the terms "data mirroring," "disk mirroring," "remote mirroring," "mirrored storage" and "server clustering," plus a form PTO-1449 to facilitate the Examiner's consideration of these on the record. Those examples are as follows.

- Definition of "data mirroring" from webopedia.com (http://www.webopedia.com/TERM/D/data_mirroring.html).
- Definition of "disk mirroring" from webopedia.com (http://www.webopedia.com/TERM/D/data_mirroring.html).
- "What is data mirroring?" from LIUtilities (http://www.liutilities.com/products/winbackup/backupterms/datamirroring/)
- Use of term "remotely mirrored" in a whitepaper from The Winter Corporation entitled "Enterprise Data Integrity, The Role of Storage in Database Integrity and Restartability" (http://www.emc.com/continuity/edi_winter_corp.dpf-size524.2k, at page 1)
- "Real time data mirroring and replication" from InTechnology (http://www.intechnology.co.uk/html/MDS/replicationintro.asp)
- "Mirrored storage" from EMC (http://www.emc.com/pdf/news/1202_robinson.pdf)
- Definition of "clustering" from webopedia.com (http://www.webopedia.com/TERM/C/clustering.html).

Applicant submits that the Examiner's interpretation of the '734 patent is inconsistent with what one of ordinary skill in the art would have understood as definitions of data mirroring, etc., and server clustering. Upon review of the noted examples, it should be clear that (A) clustered servers are different than a local storage server and a corresponding mirror storage server, and (B) a master/slave server relationship is different than a local/mirror storage server relationship. <u>Question:</u> How can the

Examiner continue to assert that the ordinarily-skilled artisan would view two of the clustered servers of the '734 patent as representing a local and a mirror storage server given the evidence (in the form of the examples noted above) to the contrary?

Furthermore, if Applicant had only argued that the '734 patent does not disclose local/remote storage servers, then maybe the Examiner's rebuttal would be reasonable. But Applicant also made two additional arguments[2] as follows:

> More particularly, **[(2)]** it is unreasonable to interpret node 602 as storing a mirror of the data stored on node 601. Rather, each of nodes 601 and 602 maintain their own cash copies of data stored on the common resource represented by storage device 57. Moreover, **[(3)]** an update sent from node 601 to node 602 cannot be considered a mirror storage request that corresponds to a primary storage request received (by node 60i) from a network host (which would be external to cluster 58).

The Examiner has ignored these additional arguments. Doing so permits the Examiner to ignore the significant differences in context between server clustering ('734 patent) versus SAN/data-mirroring (present invention), which is improper.

At this time, Applicant requests the Examiner to address arguments (2) and (3) reprinted above.

As to argument (2), Applicant poses the question: How can the Examiner reasonably explain that nodes which keep respective cash copies of data stored on a common resource equate to one of the nodes storing a mirror of another node?

As to argument (3), a mirror storage request received by a primary storage server would come from a network host that is external to the primary storage server. In the '734 patent, a mirror-update from node 601 to node 602 is completely internal to cluster 58. Question: How can node 601 be internal to cluster 58 for the purposes of the '734 patent and yet be considered by the Examiner as external to cluster 58? The Examiner's interpretation of node 601 is inconsistent with the context of the '734 patent. How can the Examiner rebut this inconsistency?

The foregoing discussion has reiterated that a distinction of claim 1 over the '734 patent is, e.g., sending a mirror storage request from the local storage server to the mirror storage server. Claims 2-4, 7-9 and 17-22 depend at least indirectly from claim 1 and similarly distinguish over the '734 patent, at least by dependency.

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[2] See page 5 of the previous response.

Independent claims 24, 32 and 39 similarly concern mirroring of data on a local storage server and a remote storage server. Accordingly, claims 24, 32 and 39 distinguish over the '734 patent for reasoning similar to that explained above regarding claim 1.

For the reasons given above, the §102(e) rejection is improper and Applicant requests that it be withdrawn.

§103 Rejections

Beginning on page 10 of the Office Action, claims 5, 6 10 and 13-16 are rejected under 35 U.S.C. §103(a) as being unpatentable over the '743 patent in view of U.S. Patent No. 6,606,643 to Emens et al. (the '643 patent). Applicants traverses.

On page 13, claim 23 is rejected under §103(a) as being obvious over the combination of the '734 and the '643 patents in further combination with U.S. Patent No. 6,633,587 to Bennett (the '587 patent).

Also on page 14, under item 5, there is the following statement: "Claims 25-31, 33-38 and 40-43 do not teach or define any limitation over claims 1-24 and therefore are rejected for similar reasons." Applicant infers that claims 25-31, 33-38 and 40-43 are being rejected under §103(a) as being obvious over the '734 patent, but it is not clear to Applicant whether it is based upon the '734 taken alone or in combination with one of the other applied patents.

Applicant traverses the various rejections under §103(a). A distinction over the '734 patent has been noted above in the traversal of the §102(e) rejection. Neither of the '643 patent nor the '587 patent makes up for the deficiencies in the '734 patent. Accordingly, the distinction over the '734 patent also represents a distinction over each of the '643 and '587 patents.

In view of the foregoing discussion, withdrawal of the various rejections under §103(a) of claims 5-6, 10, 13-16, 23, 25-31, 33-38 and 40-43 is requested.

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CONCLUSION

The issues in the case are considered to be resolved. Accordingly, Applicants again request a Notice of Allowability.
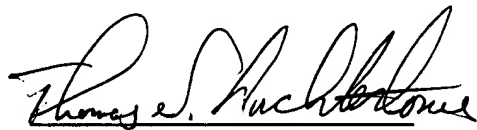
Person to Contact

In the event that any matters remain at issue in the application, the Examiners are invited to contact the undersigned at (703) 668-8000 in the Northern Virginia area, for the purpose of a telephonic interview.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-2025 for any additional fees under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,
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